Acquisition Management Policy - (4/2014)

4 Policy for Critical Lifecycle Management Functions and Disciplines Revised 1/2012

Sound acquisition management requires that service organizations integrate and manage many critical functions and disciplines working to the common purpose of fielding high-quality, trouble-free products and services. These disciplines vary, depending on the type of investment program, but typically include configuration management, real property, integrated logistics support, test and evaluation, independent operational assessment, deployment planning, human factors, environmental, occupational safety and health, and energy considerations, information technology, systems engineering, security, system safety management, risk management, and data standardization. The following specific policy requirements apply to these functional disciplines. FAST contains additional guidance.

4.1 Configuration Management

4.1.1 Scope Revised 1/2008

Configuration management applies to all systems, sub-systems, equipment, components, and assets captured in the FAA Enterprise Architecture. This includes all NAS and non-NAS information technology hardware, software, firmware, documentation, interfaces, standards, test and support equipment, facility space, spares, training and courseware, and manuals. Configuration management begins with the baselining of requirements documentation and ends with decommissioning of physical assets or the termination of services. Before introducing new equipment or software, the responsible solution provider must prepare a change proposal and have it approved by the appropriate configuration control board. This is required for expenditure of both operations and facilities and equipment funding. Configuration management of FAA systems and equipment complies with all agency safety and security requirements. Detailed lifecycle configuration management policy and procedures are in FAA Order 1800.66.

4.1.1.1 Configuration Identification

Service organizations, regions, and other solution providers shall identify configuration items and shall develop appropriate configuration documentation to define each configuration item. This activity includes the development of a product top-down structure that summarizes the total units and configuration documentation for the system or configuration item, and the assignment of unique identifiers, which identify units, and groups of units, in a product. Configuration identification and product information shall be maintained and readily available to all FAA decision-makers. Baselined documentation shall be provided to the appropriate program, service organization, or national program support library, and shall be maintained with all necessary links to the CM information management system. To ensure configuration management information is available to all decision-makers and CM practitioners in the FAA community, the central configuration management authority shall be responsible for providing the necessary facilities and electronic tools to document, monitor, and CM information in the NAS.

4.1.1.2 Configuration Status Accounting

Service organizations, regions, and other solution providers shall develop and maintain configuration information for their configuration items or products in a systematic and disciplined manner in accordance with this policy and national configuration management process and procedures. Status accounting information includes developing and maintaining site configuration data, and the incorporation of modification data on systems and configuration items. This configuration information must be available for use by decision-makers over the lifecycle of the product.

4.1.1.3 Configuration Control Boards

A configuration control board with an approved charter and operating procedures shall be the official FAA-wide forum used to establish configuration management baselines and to approve / disapprove subsequent changes to those baselines. Proposed changes to configuration management baselines must be submitted to the appropriate configuration control board on the FAA-approved case file - NAS Change Proposal (NCP) form. A configuration control board shall document its approval / disapproval decision on the FAA-approved configuration control decision form.

4.1.1.4 Commercial Off-The-Shelf, Non-Developmental Items, and Commercially Available Software

After FAA acceptance, Commercial Off-The-Shelf (COTS), Non-Developmental Items (NDI), and Commercially Available Software (CAS) systems shall be maintained under configuration control. This control shall entail the management of a performance specification, and a data package, if available. Control will require the establishment and maintenance of records indicating the version of COTS / NDI / CAS at specific locations. When identifying COTS as a proposed solution, Service organizations and other solution providers shall analyze and consider the impacts of vendor modification of COTS / NDI / CAS products during vendor production and routine vendor maintenance. Appropriate constraints and notification requirements of vendor changes shall be incorporated into purchase agreements to enable management of product changes to the maximum extent possible.

4.1.2 Application **Revised 1/2008**

A configuration control board with an approved charter and operating procedure is the official agency-wide forum for establishing configuration management baselines and approving or disapproving changes to those baselines. Configuration control board charters and operating procedures record board membership and the programs and configuration items managed by the board. Proposed changes and associated decisions to configuration management baselines are

submitted to the appropriate configuration control board on the appropriate agency-approved form.

4.1.3 Structure and Responsibilities Revised 11/2009

FAA configuration management has an enterprise-wide, multi-layer structure with each layer managing an increasing level of detail. The specific responsibilities of each layer are as follows:

FAA Configuration Management Authority:

- Coordinates the development and establishment of FAA configuration management policy, processes, and guidance;
- Assists lines of business, staff offices, service organizations, service areas, and other solution providers with development of CCB charters and operating procedures;
- Provides training, facilities, and electronic tools to document, monitor, and report configuration management information;
- Maintains a mechanism for assigning hardware names, asset tags, and identifiers for systems, interface documentation, and system documentation;
- Make accessible the NAS-MD-001, NAS Master Configuration Index Subsystem Baseline Configuration and Documentation Listing, using data available from the CM information management system. All configuration control boards follow the direction of the FAA Configuration Management Authority regarding the type, content, and availability of information in the information management system to ensure validity of data in NAS-MD-001.

A cross-functional team comprised of senior managers advises the Configuration Management Authority, serves as forum for addressing and resolving issues, and assists in the implementation of configuration management policy and solutions.

NAS Configuration Control Board:

- Controls changes to NAS systems and associated documentation not assigned to a lower-level CCB or not identified for control by the Joint Resources Council;
- Baselines Interface Requirements Documents and controls non-FAA or non-baseline system interfaces to the NAS;
- Approves service organization, service area, and other solution provider CCB charters and updates;
- Resolves problems regarding NAS system requirements among service organizations or other solution providers;
- Approves changes to NAS technical documentation and ensures traceability of requirements from the NAS level to the system and subsystem level;
- Manages changes to the final program requirements document, and notifies the investment decision authority if those changes affect cost, schedule, or performance.

Service Organization Configuration Control Boards:

- Approve or disapprove proposed changes to configuration items under their purview for the lifecycle of the configuration item;
- Ensure all changes have been fully analyzed and coordinated with all organizations affected by the change;
- Refer to the NAS Configuration Control Board proposed changes that exceed their approval authority;
- Establish functional, allocated, product, and operational baselines for all NAS systems;
- Manage the site configurations of FAA facilities in accordance with FAA-STD-058, FAA Standard Facility Configuration.

Service-Area Configuration Control Boards:

- Control changes to facility equipment layout drawings, critical power panel designations, and unique regional equipment, as identified in their charters;
- Regularly validate the accuracy of baselined facility space and power panel documentation.

The service-area configuration management plan identifies the facilities that are subject to verification and audit and specifies the audit interval. The plan also documents the configuration management program, including the methodology and processes used to accomplish service-area configuration management tasks.

Non-NAS Information Technology Configuration Control Board:

- Manages non-NAS information technology systems and associated documentation not assigned to a lower-level CCB or not identified for control by the Joint Resources Council except for data exchange standards;
- Baselines Interface Requirements Documents to non-NAS systems;
- Approves line of business staff office and other solution provider CCB charters and updates;
- Approves changes to non-NAS information technology technical documentation and ensures the traceability of requirements;
- Baselines the final program requirements document or specification.

Non-NAS Line of Business Staff Office or Solution Provider Configuration Control Boards:

- Approve or disapprove proposed changes to configuration items under their purview for the lifecycle of the items;
- Ensures all changes are fully analyzed and coordinated with all organizations affected by the change;
- Refers changes to the Non-NAS IT CCB proposed changes that exceed their approval authority;
- Establish functional, allocated, product and operational baselines for all non-NAS systems. This includes establishing and documenting site configurations, including as-built equipment layout drawings and critical power panel designations, and creating baseline documentation for FAA information technology facilities.

NAS and Non-NAS Information Technology Acquisition-Level Configuration Management:

Service organizations, LOB staff offices, and other solution providers charged with providing solutions to Enterprise Architecture requirements do the following:

- Establish, implement, and maintain configuration management plan(s) that document the configuration management program, including the methodology and processes used to accomplish configuration management tasks;
- Include requirements for configuration management planning, process, procedures and products in all acquisition contracts;
- Document transition plans and activities for field organizations; and
- Manage the lifecycle of configuration items and associated baseline documentation, which may include training material, courseware, and logistics support documentation assigned to them.

4.1.4 Activities **Revised 11/2009**

FAA lines of business, staff offices, service organizations, service areas, and other solution providers develop the infrastructure, processes, and documentation necessary to conduct the following configuration management activities:

Planning and Management: Plan, coordinate, document, and manage all tasks necessary to manage the configuration of assigned enterprise architecture products throughout all phases of the lifecycle management process. A configuration management plan formalizes processes and procedures and roles and responsibilities, and ensures continuity of configuration management practices at all levels of management.

Configuration Identification: Identify the configuration items of the total product and develop documentation to define each. This activity includes development of a top-down configuration management structure for the product, and the assignment of unique identifiers for the units and groups of units in the product. Configuration identification and product information is maintained and be readily available to all FAA decision-makers.

Baseline Management: Establish and maintain a configuration baseline that represents technical aspects of approved product requirements. Baselined documentation is maintained by the appropriate line of business program office, staff office, or service organization, and is accessible in a secure environment through the program support library.

Configuration Change Management: Identify, document, coordinate, evaluate, and adjudicate proposed changes to a configuration baseline. Approved changes are documented, implemented, verified, and tracked to ensure incorporation into all impacted assets and their support infrastructure.

Configuration Status Accounting: Capture, store, and access the configuration information needed to manage products and product information. Configuration information must be electronically available for use by decision-makers over the lifecycle of the asset.

Configuration Verification and Audit: Periodically audit operational products to ensure consistency between the product and its baseline documentation. This activity includes verification of facility baselines, the incorporation of approved modifications, and product audits after commissioning.

Information/Data Management: Manage configuration data and information according to requirements in FAA Order 1375.1, Information/Data Management Policy.

4.1.5 Commercial Off-The-Shelf, Non-Developmental Items, and Commercially Available Software **Revised 1/2008**

Commercial off-the-shelf, non-developmental items, and commercially available software are maintained under configuration control after acceptance into use by the FAA. This control requires management of the performance specification and data package, if available, and the establishment and maintenance of records indicating the version at specific locations. When identifying COTS as a proposed solution, FAA lines of business, staff offices, service organizations, and other solution providers must analyze and consider the impact of vendor modification of products throughout the intended service life. Appropriate constraints and notification requirements of vendor changes must be incorporated into purchase and maintenance agreements.

4.1.6 Local Changes **Added 1/2008**

Local changes affecting in-service baselined systems must be evaluated by the appropriate line of business, staff office, or service organization and can be authorized only by the responsible configuration control board.

4.1.7 Operational Configuration Management Policy **Added 1/2008**

AMS configuration management policy applies to all operational assets. Detailed operational NAS configuration management policy is in Order 1800.66, paragraph III-4. Detailed operational non-NAS IT configuration management policy is in paragraph III-4.

4.1.8 Non-NAS IT CM for Enterprise Data Centers and Other IT Facilities **Added 1/2008**

Line of business/staff office configuration management personnel validate, on a regular basis, baselined facility space and power panel documentation for accuracy. The line of business/staff office configuration management plan identifies the baselined facilities subject to verification

and audit and specifies the audit interval. The plan also documents the configuration management program, including the methodology and processes used to accomplish IT facility configuration management tasks.